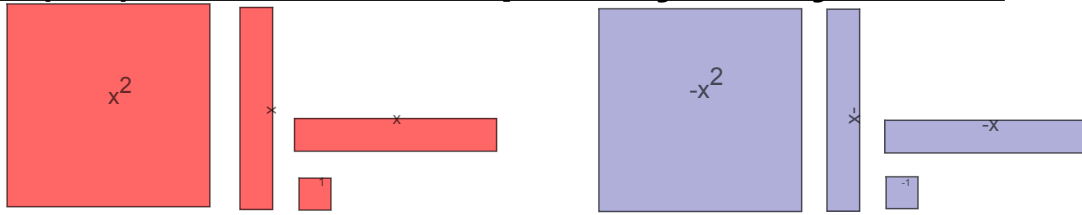


**L6 (7.6) Monomial Multiplied by a Polynomial**

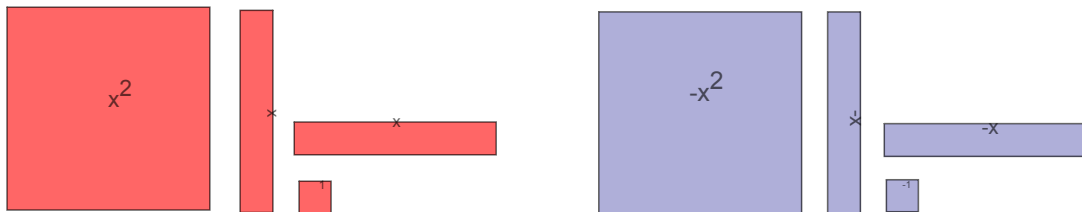
Ex. 1: Write the product modelled by the rectangle.

a)

$$-x \times (x + 2) = -x^2 - 2x$$

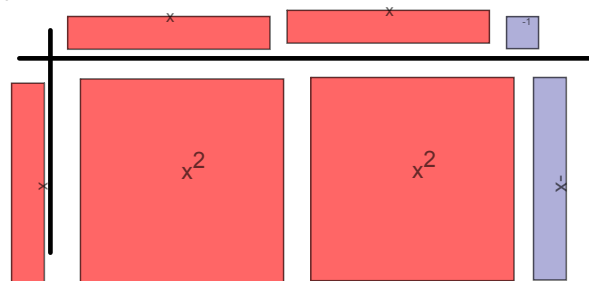
b)

$$3x \times (2x + 4) = 6x^2 + 12x$$



Ex. 2: Use algebra tiles to multiply (expand).

$$x(2x - 1) = 2x^2 - x$$



**L6 (7.6) Monomial Multiplied by a Polynomial**

Ex. 1: Use an area model to multiply (expand).

$$3x(2x + 4) = 6x^2 + 12x$$

**NOTE: WE CAN ALSO DO THIS ALGEBRAICALLY.**

Ex. 2: Expand.

a)  $2x(3x - 2)$

$= 6x^2 - 4x$

b)  $-x(5 - 4x)$

$$= -5x + 4x^2$$

$$= 4x^2 - 5x$$

c)  $3x(4x^2 + x - 3)$

$= 12x^3 + 3x^2 - 9x$

Assigned Work

p. 281-282

#1b, 2b, 3bc, 4bc, 7bcd, 8bcd